

Environmental Critical Areas

Refresher (101)
July 15, 2010

2010 CAO Update

- ▶ The City Council has prioritized a review of selected aspects of the Environmentally Critical Areas Ordinance (CAO)
- ▶ A scope of this update has yet to be set by the City Council (expected July 2010)
- ▶ A refresher for the Planning Commission of the current critical areas ordinance and the anticipated “topics” is appropriate

Agenda for Tonight

- ▶ “High Level” Definition of Critical Areas
- ▶ City Project Review
- ▶ Implications for Property Owners
- ▶ Best Available Science
- ▶ You may have heard...

Environmentally Critical Areas

“High Level” Definitions
And Overview

What are environmentally critical areas?

- ▶ The state Growth Management Act requires cities and counties to designate and protect:
 - Wetlands
 - Fish and wildlife habitat conservation areas, which include:
 - ▶ Streams
 - ▶ Lakes and Ponds
 - ▶ Wildlife Corridors

What are environmentally critical areas?

- ▶ The state Growth Management Act requires cities and counties to designate and protect:
 - Aquifer recharge areas
 - Geologically hazardous areas
 - ▶ Erosion
 - ▶ Seismic
 - ▶ Landslide
 - ▶ Erosion Hazard Near Sensitive Water Bodies
 - Frequently flooded areas

Focus for tonight

► Let's start with:

- Wetlands
- Streams
- Geohazards – in particular the Landslide and Erosion hazard areas

Wetlands - Defined

- ▶ "Wetland" means areas that are inundated and saturated with water often enough and long enough to support vegetation typically adapted for life in saturated soil conditions. Wetlands may include depressions that collect surface water, marshy edges of streams and lakes, or other areas that support wetland vegetation.

Wetlands

- ▶ In short, for an area to be a wetland:
 - the soil is wet such that it is typically anaerobic (oxygen deprived), and
 - the vegetation that naturally grows, is suited to anaerobic soil conditions
- ▶ Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, such as ditches, stormwater facilities, or landscaping ponds

Wetland



Wetland



Wetland



Fish and Wildlife Habitat Conservation areas - Defined

- ▶ "Fish and wildlife habitat conservation areas" means those areas that are essential for the preservation of critical habitat used by designated endangered, threatened, and sensitive species. This includes:
 - Streams, lakes, and naturally occurring ponds
 - State natural area preserves, waters of the state, and natural resource conservation areas
 - Wildlife habitat corridors for connections between habitats

(Fish and Wildlife Habitat Conservation areas) Streams - Defined

- ▶ "Streams" means those areas in the City where surface water produces a defined channel or bed
- ▶ Streams do not include ditches, storm water runoff conveyance (pipes), or other entirely artificial watercourses, unless they are used by salmonids or are used to convey streams that existed prior to the construction of the artificial watercourses

Stream



Stream



Stream



(Geologically Hazardous Areas)

Landslide Hazard Area - Definition

- ▶ Landslide Hazard Areas generally are:
 - Areas with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet; or
 - Areas greater than 15% slope with groundwater seepage, specific soil conditions, indications of past movements, or that are at risk of stream incision

Landslide Hazard Area



Landslide Hazard Area



(Geologically Hazardous Areas)

Erosion Hazard Area - Definition

- ▶ Erosion hazards generally consist of areas where the soil type, sometimes in combination with slope, makes the area susceptible to erosion when disturbed

Erosion Hazard Near Sensitive Water Body Overlay - Definition

- ▶ The Erosion Hazard Near Sensitive Water Body Overlay (EHNSWB) is a designation that includes two specific areas:
 - The “No-Disturbance Area”; and
 - Areas within the overlay that drain to the No-Disturbance Area

Erosion Hazard Near Sensitive Water Body Overlay

- ▶ The No-Disturbance Area is defined by boundaries:
 - The upslope boundary lies at the first obvious break in slope ($>15\%$ slope) from the upland plateau over onto the steep valley walls
 - The downslope boundary is the extent of those areas designated as erosion or landslide hazard areas

Environmentally Critical Areas

City Project Review
July 15, 2010 – 101B

Agenda for Tonight

- ▶ Questions following Last Week?
- ▶ City Project Review
- ▶ Implications for Property Owners
- ▶ Best Available Science
- ▶ You may have heard...

Questions?



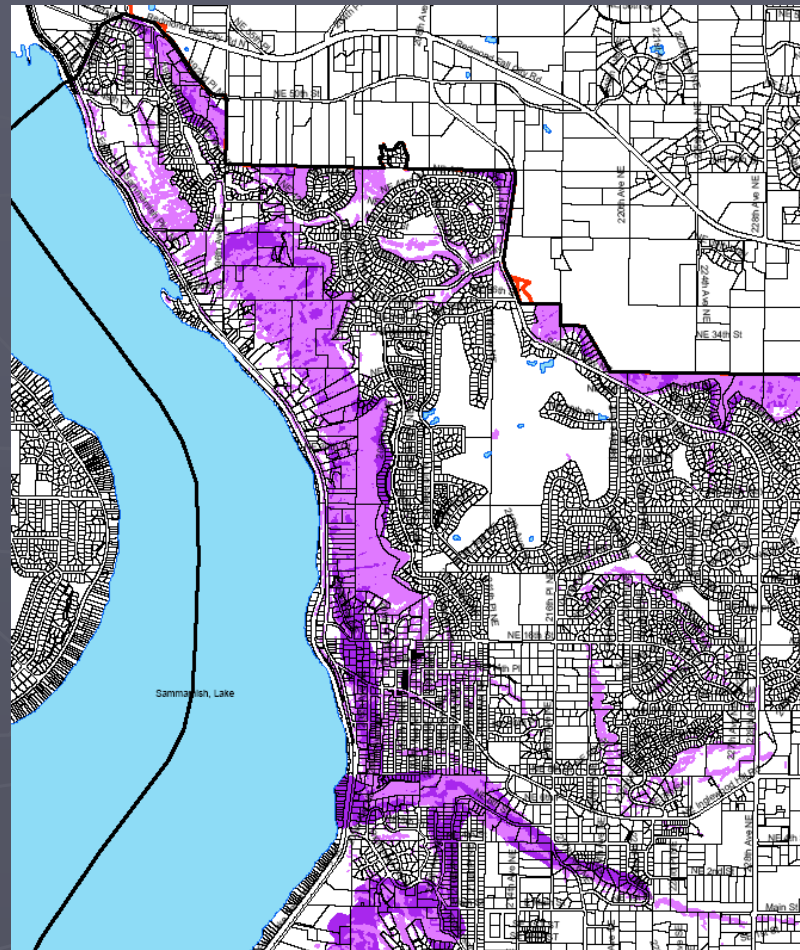
But wait! – what are Buffers?

- ▶ "Buffer" means a designated area contiguous to a steep slope or landslide hazard area intended to protect slope stability, attenuation of surface water flows and landslide hazards, or a designated area contiguous to a habitat conservation area, stream or wetland intended to protect the habitat, stream or wetland and be an integral part of the habitat, stream or wetland ecosystem.

Landslide Hazard Areas



Landslide Hazard Area Map



How would most people know if they had one?

- ▶ Maps of known critical areas are available at City Hall and on the Internet
- ▶ Visible on-site (e.g. slopes with a rise of 10 feet in a distance of 25 feet)
- ▶ Recently developed property has a Notice on Title
- ▶ A critical areas study has been conducted by the owner

Project Review and Critical Areas

- ▶ The City proactively engages property owners regarding environmental critical areas when:
 - The property owner applies for a permit and initiates contact with the City
 - The City is notified of work being done without permits (i.e. a code enforcement investigation is initiated)

Project Review (1 of 3)

► Pre-Application Stage for Permits

- Most people looking to apply for a permit, will either contact the City directly, or have a consultant contact the City
- The City staff will provide advice based upon a specific site. This advice is generally based upon a variety of sources (e.g. maps, previous projects, etc) available to City staff.
- A pre-application conference may be scheduled

Project Review (2 of 3)

- ▶ At the time of permit application, a permit applicant is required to disclose all known critical areas on the site and within the vicinity.
- ▶ Once a permit has been applied for, the City evaluates available information to determine if environmentally critical areas are likely present on site.
- ▶ Additional information may be required from the applicant if environmentally critical areas are likely present on site.

Project Review (3 of 3)

- ▶ During project review the City conducts a peer review of environmentally critical area information.
- ▶ Peer review confirms location and type of the critical area. It also confirms whether or not the proposal is consistent with adopted regulations

Project Review - Disputes

- ▶ Wetland and stream determinations may be appealed as part of the project review
- ▶ Partner with Department of Ecology for free peer review of disputed wetland determinations, and Department of Fish and Wildlife for disputed stream findings.

Environmentally Critical Areas

City Project Review (cont.)

September 2, 2010 – 101C

Agenda for Tonight

- ▶ Questions from July? So far, we've covered:
 - Basic description of "what they are"
 - City Project Review
- ▶ Implications for Property Owners
- ▶ Best Available Science
- ▶ You may have heard...

Frequently Flooded Areas - Defined

- ▶ "Frequently flooded areas" means those city lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance, and attenuation functions. Generally this includes the shore of Lake Sammamish, wetlands, and some streams

Critical Aquifer Recharge Areas - Defined

- ▶ "Critical aquifer recharge areas" means those areas in the City of Sammamish with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARAs have geologic conditions that create a high potential for contamination of groundwater or contribute significantly to the replenishment of groundwater.

Environmentally Critical Areas

Implications for Property Owners

Constrained Sites

- ▶ Generally wetlands, streams, landslide hazard areas and associated buffers cannot be “improved” with buildings or landscaping.
- ▶ Limited improvements may be authorized on a case-by-case basis for sites with no unconstrained area outside of buffers or critical areas

Large-scale critical areas

- ▶ Many environmentally critical areas extend across neighborhoods or areas of the City
- ▶ For example, to address drainage in landslide hazard areas, may require a “tightline” drainage system across several downstream properties

Off-site features, on-site impacts

- ▶ For example, wetland buffers may extend across property lines
- ▶ The no-disturbance area protected in the EHNSWB overlay is often downstream of the regulated property

Tools for Flexibility

- ▶ The Environmentally Critical Areas regulations provides for flexibility through a variety of tools:
 - Wetland and Stream buffer averaging
 - Buffer Reductions (wetland, stream, landslide hazard areas)
 - Partial and complete exemptions from regulation
 - Exemptions for wetlands below a minimum size

Environmentally Critical Areas

Best Available Science
Requirement - Overview

Best Available Science

- ▶ Washington State mandates an update of the Environmentally Critical Areas regulations at least once every 7 years (01/03/2013 for Sammamish).
- ▶ The proposed 2010 update is in response to the City Council request, and to address the “Sunset Provisions” in the Environmentally Critical Areas regulations

Best Available Science

- ▶ The Growth Management Act also states that cities and counties must “include the **best available science** ... to protect the functions and values of critical areas.”
- ▶ Best Available Science can include:
 - Research
 - Monitoring data
 - Inventory data
 - Survey data

Best Available Science

- ▶ BAS information should have the following characteristics:
 - Peer review by other persons who are qualified scientific experts in that scientific discipline
 - Methods that were used to obtain the information are clearly stated and able to be replicated
 - Conclusions are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions.

Best Available Science

- ▶ BAS information should have the following characteristics (cont):
 - The data have been analyzed using appropriate statistical or quantitative methods
 - The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge
 - The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information

Best Available Science sources

- ▶ City's sources and experience
 - Critical areas maps
 - Planning Policy documents (Beaver Lake Plan, Inglewood Basin, etc)
 - Project experience and data
- ▶ Public process
- ▶ Local, state or federal natural resource agencies
 - Syntheses of science
 - WRIA recommendations
- ▶ State agency review

Environmentally Critical Areas

You may have heard...



You may have heard...

- ▶ “Isolated wetland” definition can’t be met by any wetland in Sammamish...
- ▶ In fact, staff review has confirmed isolated wetlands on several recent projects (Wrobel, Ivy 12 subdivision, others)

You may have heard...

- ▶ A ditch should not be regulated as a stream...
- ▶ The truth is, it depends.
 - Some a ditch is just a ditch.
 - However, some ditches carry water that previously was in a stream channel
 - If the stream or ditch serves as habitat used by designated species (i.e. salmonids), then protection is mandated by the State as a FWHCA.
- ▶ And...it's sometimes tricky to know just by looking

Stream... or Not?



You may have heard...

- ▶ Where a street crosses a wetland or buffer (and “divides” the feature), it should define the boundary of the wetland and/or its associated buffer...
- ▶ This is already provided for in the code.
- ▶ And, wetlands can extend across the street

A wetland divided unto itself?



You may have heard...

- ▶ Removal of noxious weeds of any quantity requires a permit and vegetation plan approved by the City. Homeowners are not removing their noxious weeds because of the onerous regulation...
- ▶ Staff shares the concern, and is hoping to address this as part of the this update. Staff currently provides assistance for interested homeowners, and wants to improve this approach.

You may have heard...

- ▶ Current CAO is prohibiting development...
- ▶ Since adoption, the City has processed many hundreds of land use and building permits that required critical areas review. The City has also processed over 20 RUE's – all approved.
- ▶ Critical areas affect how development is designed, not whether development occurs. Critical areas can affect or limit the creation of new lots and plat design, but will not prevent a new home on an existing lot.

Council Direction

- ▶ Complete review of Environmentally Critical Areas Regulations
 - Comply with required update – due 2014
 - Best Available Science review of all regulated features

Next Steps

- ▶ Expected process:
 - Planning Commission public input, review, and recommendation
 - City Council public input, review, and adoption
- ▶ Based on scope, BAS review likely will require some consultant assistance

Critical Areas and Shorelines

- ▶ Do Environmentally Critical Area regulations apply within shorelines?
- ▶ Yes. On March 18, 2010, *Engrossed House Bill 1653* became effective. EHB 1653 confirms that critical area regulations adopted under the Growth Management Act apply within Shoreline areas.
- ▶ The CAO regulations apply until Ecology approves either a comprehensive new SMP that meets Ecology's guidelines, or an SMP amendment related specifically to critical areas